

Claims

1. A process for stabilizing the pH of a pulp suspension in the stock preparation of a paper machine, characterized by increasing the alkalinity of said paper making pulp suspension by adding thereto a combination of an alkali metal hydroxide feed and a carbon dioxide feed which feeds substantially counter each other's pH changing effect, said feeds being provided in an amount sufficient to achieve a significant buffering effect of said pulp suspension while enabling utilization of an excess of said hydroxide or said carbon dioxide for adjusting the pH of said pulp suspension and maintaining the pH at a desired level throughout the paper making.
2. Process according to claim 1, characterized in that the pH of said pulp suspension is adjusted to a pH between about 7 and 9 by adding an excess of said alkali metal hydroxide or by adding an excess of said carbon dioxide.
3. Process according to claim 1, characterized in that said alkali metal hydroxide is aqueous sodium hydroxide and said carbon dioxide is gaseous carbon dioxide.
4. Process according to claim 1, characterized in that said alkali metal hydroxide is fed to said pulp suspension prior to the feeding of said carbon dioxide.
5. Process according to claim 1, characterized in that the alkalinity of said pulp suspension is increased by providing a substantially equal molar amount of alkali metal hydroxide and dissolved carbon dioxide, said amount being sufficient to provide a significant buffering effect at about pH 8.
6. Process according to claim 1, characterized in that said pulp suspension is chemical or mechanical pulp.
7. Process according to claim 6, characterized in that said pulp suspension is bleached chemical pulp.
8. Process according to claim 1, characterized in that said pulp suspension contains and/or is intended to contain calcium carbonate filler.

9. Process according to claim 1, characterized in that said alkali metal hydroxide and carbon dioxide feeds are added to said pulp suspension flowing in a pipe leading to a stock preparation tank.

10. Process according to claim 1, characterized in that said alkali metal hydroxide and said carbon dioxide are combined prior to feeding to the pulp suspension.

add B2
11. A process for producing paper comprising

- providing a paper making pulp suspension in the stock preparation of a paper machine;
- increasing the alkalinity of said pulp suspension by adding thereto a combination of an alkali metal hydroxide feed and a carbon dioxide feed which feeds substantially counter each others pH changing effect, said feeds being provided in an amount sufficient to achieve a substantial buffering effect of said pulp suspension while enabling utilization of an excess of said hydroxide or said carbon dioxide for adjusting the pH of said pulp suspension and for maintaining the pH at a desired level throughout the paper making;
- forming said pulp suspension into a web; and
- drying said web to form paper.

12. Process according to claim 14, characterized in that the pH of said pulp suspension is adjusted to a desired value between 7 and 9 by adding an excess of said alkali metal hydroxide or said carbon dioxide.

add B3

add C2